

0450

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#2



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ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/085,167

DATE: 03/19/2002
TIME: 16:12:54

Input Set : A:\99-29C1.txt
Output Set: N:\CRF3\03192002\J085167.raw

3 <110> APPLICANT: Holloway, James L.
4 Lok, Si
6 <120> TITLE OF INVENTION: SECRETED PROTEIN ZACRP4
8 <130> FILE REFERENCE: 99-29
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/085,167
C--> 10 <141> CURRENT FILING DATE: 2002-02-27
10 <150> PRIOR APPLICATION NUMBER: 60/141,928
11 <151> PRIOR FILING DATE: 1999-07-01
14 <160> NUMBER OF SEQ ID NOS: 9
16 <170> SOFTWARE: FastSEQ for Windows Version 3.0
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 1357
20 <212> TYPE: DNA
21 <213> ORGANISM: Homo sapiens
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (210)...(1196)
27 <400> SEQUENCE: 1
28 cgcggccccc ctggccccag caccctgtcc gctgccgcct cagagccggg aaaaggcagcc 60
29 ggagcccccg ccgcctgc cgcaagcgccg gcggtcagcg cgcaagccgg caccgcgc 120
30 ctgcagcctg cagccgcag cccgcagccc ggagccagat cgccggctca gaccgaaccc 180
31 gactcgaccg ccgccccccag ccaggcgcc atg ctg ccg ctt ctg ctg ggc ctg 233
Met Leu Pro Leu Leu Leu Gly Leu
32 1 5
33 281
35 ctg ggc cca gcg gcc tgc tgg gcc ctg ggc ccg acc ccc ggc ccg gga
36 Leu Gly Pro Ala Ala Cys Trp Ala Leu Gly Pro Thr Pro Gly Pro Gly
37 10 15 20 329
39 tcc tct gag ctg cgc tcg gcc ttc tcg gcg gca cgc acc acc ccc ctg
40 Ser Ser Glu Leu Arg Ser Ala Phe Ser Ala Ala Arg Thr Thr Pro Leu
41 25 30 35 40
43 gag ggc acg tcg gag atg gcg gtg acc ttc gac aag gtg tac gtg aac 377
44 Glu Gly Thr Ser Glu Met Ala Val Thr Phe Asp Lys Val Tyr Val Asn
45 45 50 55
47 atc ggg ggc gac ttc gat gtg gcc acc ggc cag ttt cgc tgc cgc gtg 425
48 Ile Gly Gly Asp Phe Asp Val Ala Thr Gly Gln Phe Arg Cys Arg Val
49 60 65 70
51 ccc ggc gcc tac ttc ttc tcc acg gct ggc aag gcc ccg cac aag 473
52 Pro Gly Ala Tyr Phe Phe Ser Phe Thr Ala Gly Lys Ala Pro His Lys
53 75 80 85
55 agc ctg tcg gtg atg ctg gtg cga aac cgc gac gag gtg cag gcg ctg 521
56 Ser Leu Ser Val Met Leu Val Arg Asn Arg Asp Glu Val Gln Ala Leu
57 90 95 100
59 gcc ttc qac qaq cag cgg cgg cca ggc gcg cgg cgc gca gcc agc cag 569

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60	Ala Phe Asp Glu Gln Arg Arg Pro Gly Ala Arg Arg Ala Ala Ser Gln				
61	105	110	115	120	
63	agc gcc atg ctg cag ctc gac tac ggc gac aca gtg tgg ctg cggtcg				617
64	Ser Ala Met Leu Gln Leu Asp Tyr Gly Asp Thr Val Trp Leu Arg Leu				
65	125	130	135		
67	cat ggc gcc ccg cac tac gcg cta ggc gcgc ccc ggc gcc acc ttc agc				665
68	His Gly Ala Pro His Tyr Ala Leu Gly Ala Pro Gly Ala Thr Phe Ser				
69	140	145	150		
71	ggc tac cta gtc tac gcc gac gct gac gcgc cct gcgc cgcc ggg				713
72	Gly Tyr Leu Val Tyr Ala Asp Ala Asp Ala Asp Ala Pro Ala Arg Gly				
73	155	160	165		
75	ccg ccc gcgc ccc ccc gag ccgc tcg gcc ttc tcg gcgc gcgc acg				761
76	Pro Pro Ala Pro Pro Glu Pro Arg Ser Ala Phe Ser Ala Ala Arg Thr				
77	170	175	180		
79	cgc agc ttg gtg ggc tcg gac gct ggc ccc ggg ccgc cgcc cac caa cca				809
80	Arg Ser Leu Val Gly Ser Asp Ala Gly Pro Gly Pro Arg His Gln Pro				
81	185	190	195	200	
83	ctc gcc ttc gac acc gag ttc gtc aac att ggc ggc gac ttc gac gcgc				857
84	Leu Ala Phe Asp Thr Glu Phe Val Asn Ile Gly Gly Asp Phe Asp Ala				
85	205	210	215		
87	gcgc gcc ggc gtg ttc cgc tgc cgt ctg ccc ggc gcc tac ttc ttc tcc				905
88	Ala Ala Gly Val Phe Arg Cys Arg Leu Pro Gly Ala Tyr Phe Phe Ser				
89	220	225	230		
91	tac acg ctg ggc aag ctg ccgc cgt aag acg ctg tcg gtt aag ctg atg				953
92	Phe Thr Leu Gly Lys Leu Pro Arg Lys Thr Leu Ser Val Lys Leu Met				
93	235	240	245		
95	aag aac cgc gac gag gtg cag gcc atg att tac gac gac ggc gcgc tcg				1001
96	Lys Asn Arg Asp Glu Val Gln Ala Met Ile Tyr Asp Asp Gly Ala Ser				
97	250	255	260		
99	cgcc cgcc cgc gag atg cag agc cag agc gtg atg ctg gcc ctg cgcc cgcc				1049
100	Arg Arg Arg Glu Met Gln Ser Gln Ser Val Met Leu Ala Leu Arg Arg				
101	265	270	275	280	
103	ggc gac gcc gtc tgg ctg ctc agc cac gac cac gac ggc tac ggc gcc				1097
104	Gly Asp Ala Val Trp Leu Leu Ser His Asp His Gly Tyr Gly Ala				
105	285	290	295		
107	tac agc aac cac ggc aag tac atc acc ttc tcc ggc ttc ctg gtg tac				1145
108	Tyr Ser Asn His Gly Lys Tyr Ile Thr Phe Ser Gly Phe Leu Val Tyr				
109	300	305	310		
111	ccc gac ctc gcc ccc gcc ccgc ccgc ggc ctc ggg gcc tcg gag cta				1193
112	Pro Asp Leu Ala Pro Ala Ala Pro Pro Gly Leu Gly Ala Ser Glu Leu				
113	315	320	325		
115	ctg tgagccccgg gccagagaag agcccgaggag ggccaggggc gtgcatgcc				1246
116	Leu				
118	ggccggggcc gaggctcgaa agtcccgccgc gagcgccacg gcctccgggc gcgcctggac				1306
119	tctgccaata aagcgaaaag cggcacgcg cagcgcccgg cagcccaggc a				1357
121	<210> SEQ ID NO: 2				
122	<211> LENGTH: 329				
123	<212> TYPE: PRT				
124	<213> ORGANISM: Homo sapiens				

RAW SEQUENCE LISTING
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Input Set : A:\99-29C1.txt
 Output Set: N:\CRF3\03192002\J085167.raw

126 <400> SEQUENCE: 2
 127 Met Leu Pro Leu Leu Leu Gly Leu Leu Gly Pro Ala Ala Cys Trp Ala
 128 1 5 10 15
 129 Leu Gly Pro Thr Pro Gly Pro Gly Ser Ser Glu Leu Arg Ser Ala Phe
 130 20 25 30
 131 Ser Ala Ala Arg Thr Thr Pro Leu Glu Gly Thr Ser Glu Met Ala Val
 132 35 40 45
 133 Thr Phe Asp Lys Val Tyr Val Asn Ile Gly Gly Asp Phe Asp Val Ala
 134 50 55 60
 135 Thr Gly Gln Phe Arg Cys Arg Val Pro Gly Ala Tyr Phe Phe Ser Phe
 136 65 70 75 80
 137 Thr Ala Gly Lys Ala Pro His Lys Ser Leu Ser Val Met Leu Val Arg
 138 85 90 95
 139 Asn Arg Asp Glu Val Gln Ala Leu Ala Phe Asp Glu Gln Arg Arg Pro
 140 100 105 110
 141 Gly Ala Arg Arg Ala Ala Ser Gln Ser Ala Met Leu Gln Leu Asp Tyr
 142 115 120 125
 143 Gly Asp Thr Val Trp Leu Arg Leu His Gly Ala Pro His Tyr Ala Leu
 144 130 135 140
 145 Gly Ala Pro Gly Ala Thr Phe Ser Gly Tyr Leu Val Tyr Ala Asp Ala
 146 145 150 155 160
 147 Asp Ala Asp Ala Pro Ala Arg Gly Pro Pro Ala Pro Pro Glu Pro Arg
 148 165 170 175
 149 Ser Ala Phe Ser Ala Ala Arg Thr Arg Ser Leu Val Gly Ser Asp Ala
 150 180 185 190
 151 Gly Pro Gly Pro Arg His Gln Pro Leu Ala Phe Asp Thr Glu Phe Val
 152 195 200 205
 153 Asn Ile Gly Gly Asp Phe Asp Ala Ala Gly Val Phe Arg Cys Arg
 154 210 215 220
 155 Leu Pro Gly Ala Tyr Phe Phe Ser Phe Thr Leu Gly Lys Leu Pro Arg
 156 225 230 235 240
 157 Lys Thr Leu Ser Val Lys Leu Met Lys Asn Arg Asp Glu Val Gln Ala
 158 245 250 255
 159 Met Ile Tyr Asp Asp Gly Ala Ser Arg Arg Arg Glu Met Gln Ser Gln
 160 260 265 270
 161 Ser Val Met Leu Ala Leu Arg Arg Gly Asp Ala Val Trp Leu Leu Ser
 162 275 280 285
 163 His Asp His Asp Gly Tyr Gly Ala Tyr Ser Asn His Gly Lys Tyr Ile
 164 290 295 300
 165 Thr Phe Ser Gly Phe Leu Val Tyr Pro Asp Leu Ala Pro Ala Ala Pro
 166 305 310 315 320
 167 Pro Gly Leu Gly Ala Ser Glu Leu Leu
 168 325
 170 <210> SEQ ID NO: 3
 171 <211> LENGTH: 31
 172 <212> TYPE: PRT
 173 <213> ORGANISM: Artificial Sequence
 175 <220> FEATURE:
 176 <223> OTHER INFORMATION: Clq Aromatic Motif

RAW SEQUENCE LISTING
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Input Set : A:\99-29C1.txt
Output Set: N:\CRF3\03192002\J085167.raw

178 <221> NAME/KEY: VARIANT
 179 <222> LOCATION: (2)...(6)
 180 <223> OTHER INFORMATION: Each Xaa is independently any amino acid residue
 182 <221> NAME/KEY: VARIANT
 183 <222> LOCATION: (7)...(7)
 184 <223> OTHER INFORMATION: Xaa is asparagine or aspartic acid
 186 <221> NAME/KEY: VARIANT
 187 <222> LOCATION: (8)...(11)
 188 <223> OTHER INFORMATION: Each Xaa is independently any amino acid residue
 190 <221> NAME/KEY: VARIANT
 191 <222> LOCATION: (12)...(12)
 192 <223> OTHER INFORMATION: Xaa is phenylalanine, tyrosine, tryptophan or
 193 leucine
 196 <221> NAME/KEY: VARIANT
 197 <222> LOCATION: (13)...(18)
 198 <223> OTHER INFORMATION: Each Xaa is independently any amino acid residue
 200 <221> NAME/KEY: VARIANT
 201 <222> LOCATION: (20)...(24)
 202 <223> OTHER INFORMATION: Each Xaa is independently any amino acid residue
 204 <221> NAME/KEY: VARIANT
 205 <222> LOCATION: (26)...(26)
 206 <223> OTHER INFORMATION: Xaa is any amino acid residue
 208 <221> NAME/KEY: VARIANT
 209 <222> LOCATION: (28)...(28)
 210 <223> OTHER INFORMATION: Xaa is any amino acid residue
 212 <221> NAME/KEY: VARIANT
 213 <222> LOCATION: (30)...(30)
 214 <223> OTHER INFORMATION: Xaa is any amino acid residue
 216 <221> NAME/KEY: VARIANT
 217 <222> LOCATION: (31)...(31)
 218 <223> OTHER INFORMATION: Xaa is phenylalanine or tyrosine
 220 <400> SEQUENCE: 3
 W--> 221 Phe Xaa
 1 5 10 15
 W--> 223 Xaa Xaa Phe Xaa Xaa Xaa Xaa Gly Xaa Tyr Xaa Phe Xaa Xaa
 20 25 30
 224
 226 <210> SEQ ID NO: 4
 227 <211> LENGTH: 987
 228 <212> TYPE: DNA
 229 <213> ORGANISM: Artificial Sequence
 231 <220> FEATURE:
 232 <223> OTHER INFORMATION: Degenerate nucleotide sequence encoding the
 233 polypeptide of SEQ ID NO:2
 235 <221> NAME/KEY: variation
 236 <222> LOCATION: (1)...(987)
 237 <223> OTHER INFORMATION: Each N is A, T, G or C
 239 <400> SEQUENCE: 4
 W--> 240 atgytnccny tnytnytnngg nytnytnngn ccngcngcnt gytgggcnyt ngnccnacn 60
 W--> 241 ccnggnccng gnwsnwsga rytnmgnwsn gcnttywsng cngcnmggnac nacnccnytn 120

RAW SEQUENCE LISTING
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Input Set : A:\99-29C1.txt
Output Set: N:\CRF3\03192002\J085167.raw

W--> 242	garggnacnw sngaratggc ngtnacnnyt gayaargtnt aygttaayat hggngngay	180
W--> 243	ttygaygtng cnacnggnca rttymgntgy mgngtncng gngcntaytt yttysnatty	240
W--> 244	acngcnggna argcnccnca yaarwsnytn wsngtnatgy tngtnmgnaa ymgngaygar	300
W--> 245	gtncargcny tngcnttyga ygarcarmgm mgnccnggng cnmgnmgnrc ncwnsncar	360
W--> 246	wsngcnatgy tncarytna ytayggngay acngtntggy tnmgnytnca yggngcncn	420
W--> 247	caytaygcny tnggngcncc nggngcnacn ttywsngnt ayytngtnta ygcngaygc	480
W--> 248	gaygcngayg cnccngcnmg ngnccnccn gcncnccng arccnmgnws ncnttywsn	540
W--> 249	gcngcnmgnna cnmgnwsnyt ntnggnwsn gaygcngnc cnngnccnmg ncaycarccn	600
W--> 250	ytngcnttyg ayacngartt ygttaayath gngggngayt tygaygcngc ncngggngtn	660
W--> 251	ttymgntgym gnytnccngg ncntayttt ttywsnatty cnytnggnna rytnccnmgn	720
W--> 252	aaracnytnw sngtnaaryt natgaaraay mnngaygarg tncargcnat gathtaygay	780
W--> 253	gayggngcnw snmgnmgnmg ngaratgcar wsncarwsng tnatgytngc nytnmgnmgn	840
W--> 254	ggngaygcng tntggtynt wnsncaygay caygayggnt ayggngccta ywsnaaycay	900
W--> 255	gnaartaya thacnnytws ngnntyytn gtntayccng ayytngcncc ncngcnccn	960
W--> 256	ccnngnytng gngcnwsnga rytnytn	987
258	<210> SEQ ID NO: 5	
259	<211> LENGTH: 24	
260	<212> TYPE: DNA	
261	<213> ORGANISM: Artificial Sequence	
263	<220> FEATURE:	
264	<223> OTHER INFORMATION: Oligonucleotide ZC20,839	
266	<400> SEQUENCE: 5	24
267	atgtacttgc cgtggttgct gtag	
269	<210> SEQ ID NO: 6	
270	<211> LENGTH: 23	
271	<212> TYPE: DNA	
272	<213> ORGANISM: Artificial Sequence	
274	<220> FEATURE:	
275	<223> OTHER INFORMATION: Oligonucleotide ZC20840	
277	<400> SEQUENCE: 6	23
278	cgacaccgag ttcgtcaaca ttg	
280	<210> SEQ ID NO: 7	
281	<211> LENGTH: 325	
282	<212> TYPE: DNA	
283	<213> ORGANISM: Artificial Sequence	
285	<220> FEATURE:	
286	<223> OTHER INFORMATION: Degenerate nucleotide sequence encoding the polypeptide of SEQ ID NO:2.	
287	polypeptide of SEQ ID NO:2.	
289	<221> NAME/KEY: variation	
290	<222> LOCATION: (1)...(325)	
291	<223> OTHER INFORMATION: Each N is independently A, T, C or G.	
294	<400> SEQUENCE: 7	
295	ctggccccgg gccggggcac caaccactcg cttcgacac cgagttcgac aacattggcg	60
W--> 296	cgacttcga cgcggggcc ggcgtttcc gctgcgtct gnccggcgcc tacttcttct	120
W--> 297	ncttcacgct gggcaagctg ccgcgttaaga cgctgtcggt taagctgatg aagaaccgcg	180
298	acgagggtgca ggccatgatt tacgacgacg ggcgtcgcg gcccgcgag atgcagagcc	240
W--> 299	agagcgttat gctggccctg cggcgccggng acgccgtctg gctgtcagcc acgaccacga	300
300	cggttacggc gccttacagca accac	325
302	<210> SEQ ID NO: 8	

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/085,167

DATE: 03/19/2002
TIME: 16:12:56

Input Set : A:\99-29C1.txt
Output Set: N:\CRF3\03192002\J085167.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:246 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:248 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7